

FIG. 1

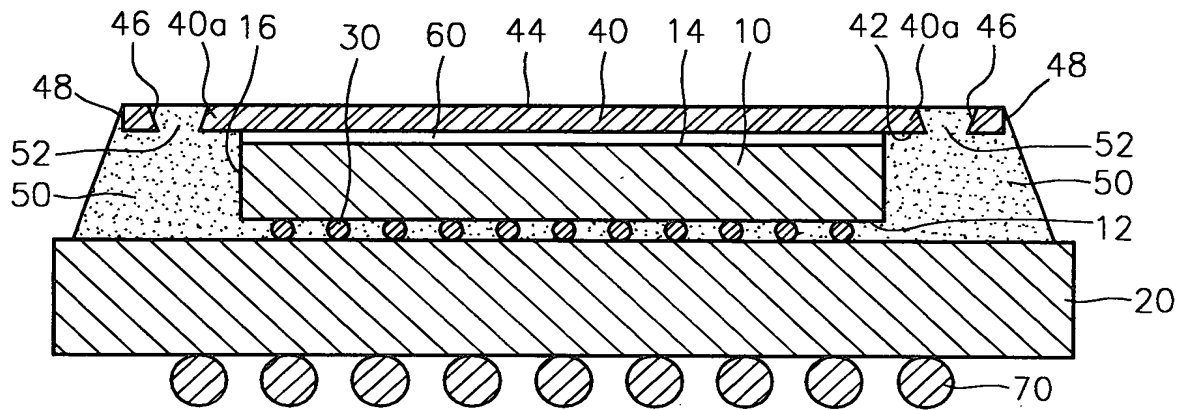


FIG. 2A

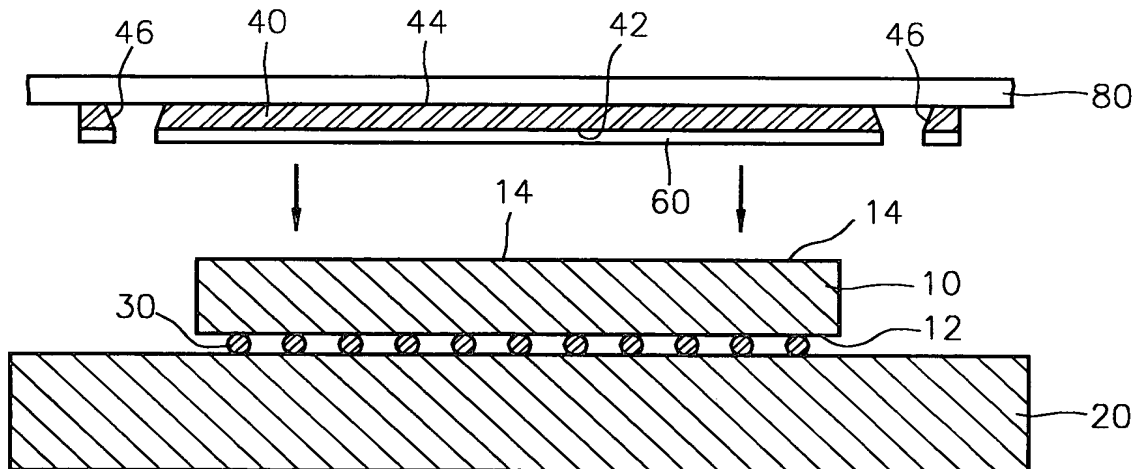


FIG. 2B

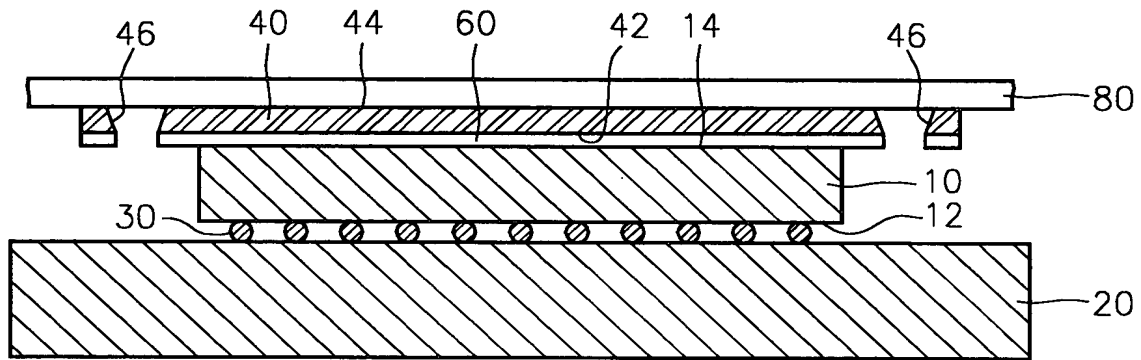


FIG. 2C

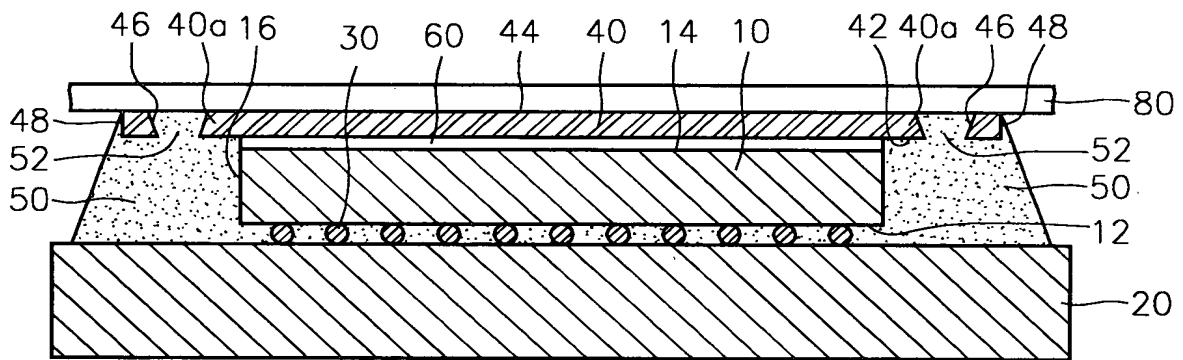


FIG. 2D

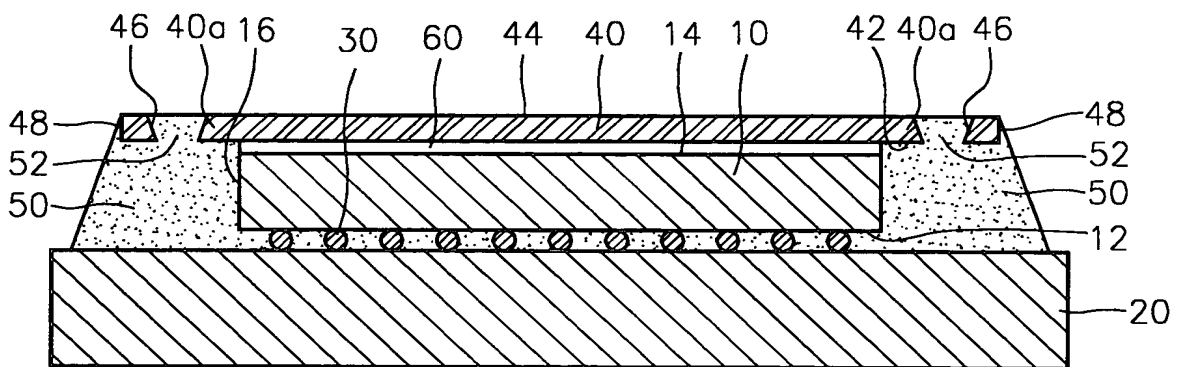


FIG. 3

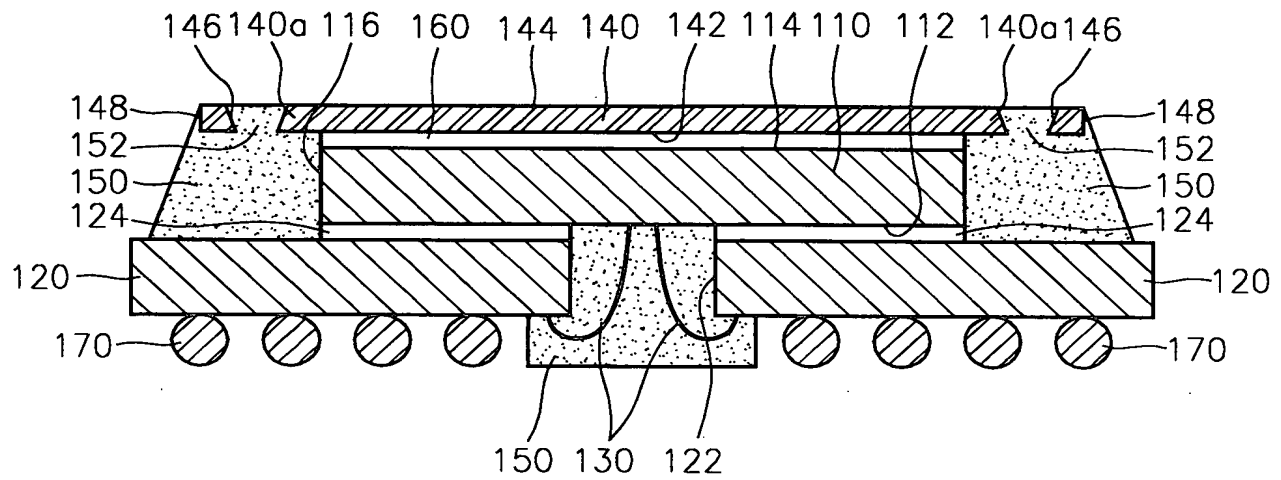
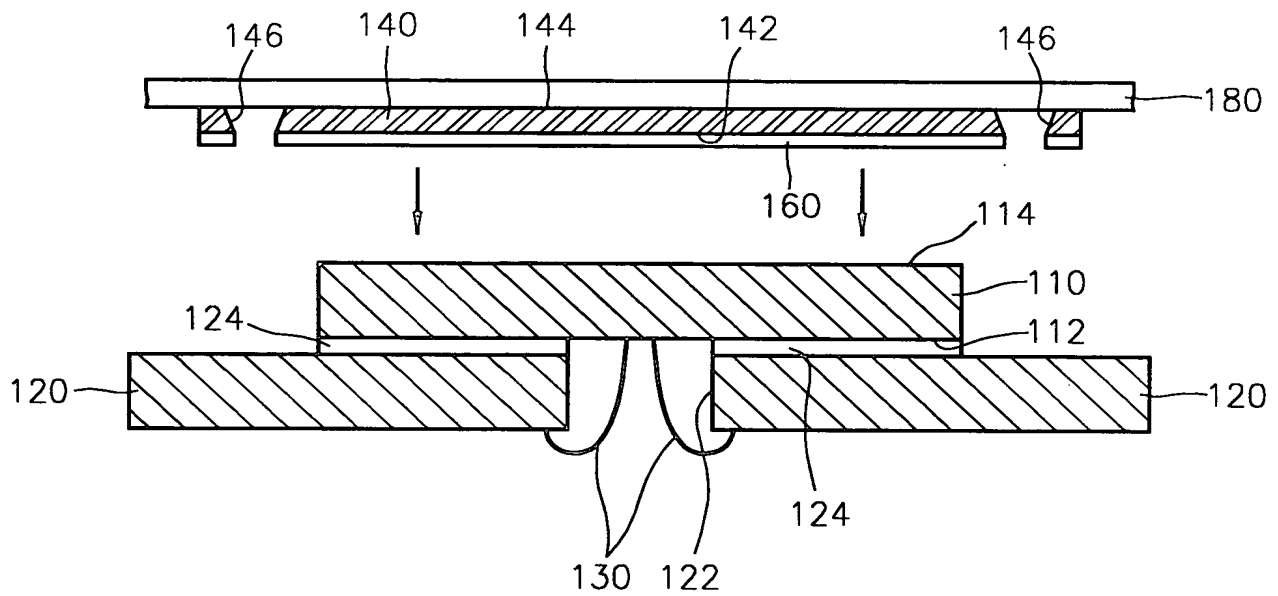


FIG. 4A



This cross-sectional view shows a semiconductor device. A substrate 120 is at the base, with a trench 122 formed in its surface. The trench 122 is filled with a material 130. A gate structure 110 is positioned above the trench 122, with a gate oxide layer 112 on its top surface. A layer 124 is located between the substrate 120 and the gate structure 110. Above the gate structure 110 is a layer 140, which is covered by a top layer 146. A contact 142 is formed in the top layer 146, and a contact 144 is formed in the layer 140. A contact 146 is also formed in the top layer 146. A layer 160 is located between the gate structure 110 and the layer 140. A layer 180 is located between the gate structure 110 and the layer 140.

[illegible][illegible]